

## **Non-Interference Compliance**

Regarding Facility id 155684

Channel 296

### **Description of Exhibit 12 Contents**

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

**Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.**

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

*[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.*

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Since the proposed translator is within 320 km of the Mexican border, 47 C.F.R. § 74.1235(d) has been taken into account and this applicant certifies that in the direction of the Mexican border, the proposed translator's 60 dBμ F(50,50) contour does not lie within 116.3 km of the Mexican border. This application is therefore in full compliance with 47 C.F.R. § 74.1235(d)(2), which states that for translators between 125 and 320 km from the border, "in no event shall the location of the 60 dBμ contour lie within 116.3 km of the Mexican border," and hence complies with 47 C.F.R. § 74.1204(h).

### Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
117331	BLH19880823KF	KCHX	74.7	74.1
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>74.1</b>

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **74.1 dBμ**, this makes the proposed translator's worst-case interfering contour **114.1 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **218.8 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population"). Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

**Antenna Manufacturer:** SCA  
**Antenna Model:** GP-FM  
**CORAGL:** 55 m  
**Maximum ERP:** 0.25 kW  
**Interfering Contour:** 114.1 dBμ  
**Max Int. Contour Distance:** 218.8 m

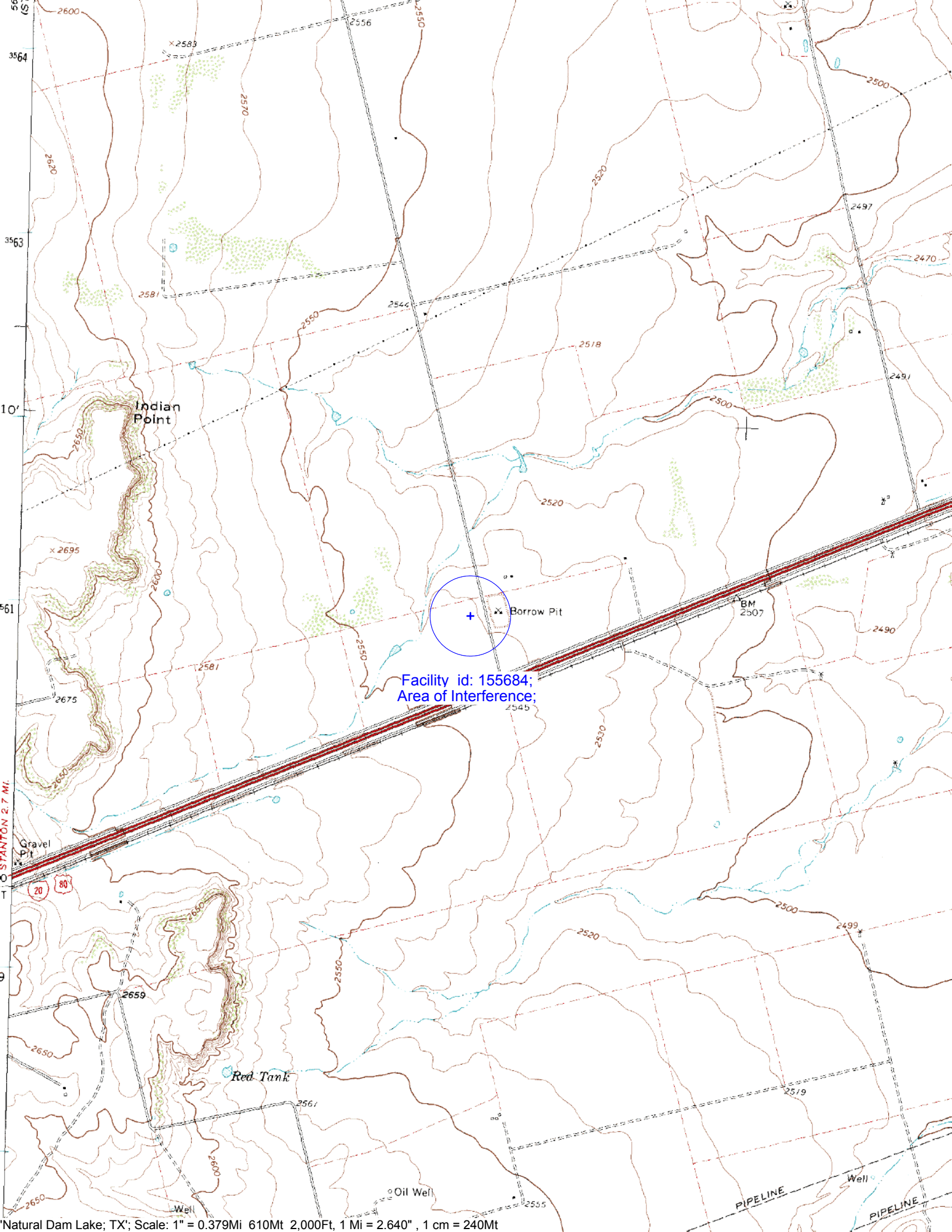
# **Adjacent Channel Study** **For Station NEW, Facility\_id: 155684**

## **Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
117331	60801	BLH	19880823KF	KCHX	CAPSTAR ROYALTY II CORPORATION	C1	MIDLAND	TX	LIC	100	1035	294	2	35.2	1.4918
631171	139995	BNPFT	20030310BIX	NEW	CALVARY CHAPEL OF TWIN FALLS, INC.	D	MIDLAND	TX	APP	0.099	881	298	2	29	0
685119	155718	BNPFT	20030828AAO	K296FG	RADIO ASSIST MINISTRY, INC.	D	MIDLAND	TX	CP	0.05	990	296	0	31.1	0
651163	157702	BNPFT	20030317LNM	NEW	CHRISTIAN BROADCASTING COMPANY, INC.	D	MIDLAND	TX	APP	0.099	983	298	2	48.8	0
651375	157862	BNPFT	20030317LWK	NEW	CHRISTIAN BROADCASTING COMPANY, INC.	D	ODESSA	TX	APP	0.25	940	298	2	71.3	0
551085	30101	BMLH	20010205AAB	KAUM	JAMES G. BAUM	A	COLORADO CITY	TX	LIC	3	704	296	0	82.3	0
987834	30104	BMLED	20040407AAQ	KPOS	EDUCATIONAL MEDIA FOUNDATION	C2	POST	TX	LIC	22	1060	297	1	121.5	0
83341	36186	BLH	19851112KJ	KSJT-FM	LA UNICA BROADCASTING CO.	C1	SAN ANGELO	TX	LIC	100	794	298	2	135	0
171842	4019	BLH	19920323KC	KEJS	BARTON BROADCASTING COMPANY	C2	LUBBOCK	TX	LIC	34	1157	293	3	150.2	0

## **Intermediate Frequencies (53 and 54 channels difference):**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
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Facility id: 155684;  
Area of Interference;